

# The 2<sup>nd</sup> International Conference on Science and Technology

```
//bio-prospecting
//computer science
//nanosciences and chemistry
//physics and its applications
//geo maritime
```

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//bio-prospecting
//computer science
//nanosciences and chemistry
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#### PROGRAM OUTLINE

#### **Eastparc Hotel**

Jl. Laksda Adisucipto, Km 6.5 Seturan, Yogyakarta Thursday, 27 October 2016

Time	Program	Venue
07.00 - 08.00	Registration	Lobby Eastparc Ballroom
08.00 – 08.30	Opening ceremony 1. Dr. Roto, M.Eng. ICST 2016 Chairman 2. Prof. Ir. Dwikorita Karnawati, M.Sc., Ph.D. Rector of Universitas Gadjah Mada	Eastparc Ballroom
08.30 - 09.30	Plenary session I Prof. Dr. G.Q. Max Lu, FAA FTSE. Surrey University, United Kingdom Moderator: Dr. Indriana Kartini	Eastparc Ballroom
09.30 - 09.40	Photo Session	Eastparc Ballroom
09.40 - 10.00	Coffee break	
10.00 – 12.00	<ol> <li>Plenary session II</li> <li>Dr. Eko Fajar Nur Prasetyo         <ul> <li>Director of Versatile Silicon, Indonesia</li> </ul> </li> <li>Prof. Dr. Muh. Aris Marfai, M.Sc.         <ul> <li>Universitas Gadjah Mada, Indonesia</li> </ul> </li> <li>Moderator: Prof. Dr. M. Baiquni, M.A.</li> </ol>	Eastparc Ballroom
12.00 - 13.00	Lunch and Prayer	Lobby Eastparc Ballroom
13.00 – 15.00	Symposium session I*	Hibiscus, Magnolia, Heliconia, Lotus, Dahlia, Tulip, Garden, Frangipani, Orchid, Violet, Sunflower, Carnation, Ballroom
15.00 - 15.15	Coffee break	
15.15 – 16.15	Symposium session II*	Hibiscus, Magnolia, Heliconia, Lotus, Dahlia, Tulip, Garden, Frangipani, Orchid, Violet, Sunflower

<sup>\*</sup> see each symposium schedule

#### PROGRAM OUTLINE

#### **Eastparc Hotel**

Jl. Laksda Adisucipto, Km 6.5 Seturan, Yogyakarta Friday, 28 October 2016

Time	Program	Venue (Room)
07.00 - 08.00	Registration	Lobby Eastparc Ballroom
08.00 – 10.00	<ol> <li>Plenary III session</li> <li>Prof. Dr. Michael Richardson         Leiden University, The Netherlands     </li> <li>Prof. Dr. Jasper Knoester         Groningen University, Jerman     </li> <li>Moderator: Dr. Roto, M.Eng.</li> </ol>	Eastparc Ballroom
10.00 - 10.15	Coffee break	
10.15 - 10.30	Poster Session	Iris
10.30 – 11.30	Symposium session III*	Hibiscus, Magnolia, Heliconia, Lotus, Dahlia, Tulip, Garden, Frangipani, Orchid, Violet, Sunflower
11.30 - 13.00	Lunch and Prayer	
13.00 – 15.00	Symposium session IV*	Hibiscus, Magnolia, Heliconia, Lotus, Tulip, Garden, Frangipani, Orchid, Violet, Sunflower, Carnation, Ballroom
15.00 - 15.15	Coffee break	
15.15 - 15.30	Poster Session	Iris
15.30 – 16.00	Traditional dance performance Faculty of Biology, Universitas Gadjah Mada Photo session Closing ceremony 1. Head of BPP 2. Vice Rector for Research and	Eastparc Ballroom
	07.00 - 08.00 08.00 - 10.00 10.00 - 10.15 10.15 - 10.30 10.30 - 11.30 11.30 - 13.00 13.00 - 15.15 15.15 - 15.30	1.   Plenary III session   1.   Prof. Dr. Michael Richardson   Leiden University, The Netherlands   2.   Prof. Dr. Jasper Knoester   Groningen University, Jerman   Moderator: Dr. Roto, M.Eng.   10.00 - 10.15   Coffee break   10.15 - 10.30   Poster Session

<sup>\*</sup> see each symposium schedule

# **Plenary Sessions**



#### PLENARY SPEAKERS



**Prof. Dr. G.Q. Max Lu FAA FTSE**President and Vice-Chancellor
The University of Surrey, Guildford United Kingdom

**Dr. Eko Fajar Nur Prasetyo**Director of Versatile Silicon, Indonesia





**Prof. Dr. Muh. Aris Marfai, M.Sc.**Faculty of Geography
Universitas Gadjah Mada, Indonesia

**Prof. dr. Michael K. Richardson**Universiteit Leiden, the Netherlands





**Prof. Dr. Jasper Knoester** Zernike Institute for Advanced Materials University of Groningen, the Netherlands

# SYMPOSIUM Bio-prospecting



### INVITED SPEAKER SCHEDULE Bio-prospecting

Time	Program	Venue
	Thursday, October 27 <sup>th</sup> , 2016	
Symposium session II	<ol> <li>Dr. Rarastoeti Pratiwi, M.Sc.         Faculty of Biology</li></ol>	Sunflower
15.15– 16.15	Lebenswissenschaftliche Fakultat, Germany	
	Moderator: Dr. Yekti Asih Purwestri, M.Si.	
	Friday, October 28th, 2016	
Symposium session IV 13.00 – 16.00	<ol> <li>Prof. R. Manjunatha Kini, Ph.D.         National University of Singapure, Singapore     </li> <li>Montarop Yamabhai, Ph.D.         Suranaree University of Technology, Thailand     </li> <li>Dr. Alfi Khitib         International Islamic University Malaysia     </li> <li>Moderator: Dr. Tri Rini Nuringtyas, M.Sc.</li> </ol>	Sunflower

#### Bio-Prospecting SYMPOSIUM PRESENTATION SCHEDULE Thursday, October 27<sup>th</sup>, 2016

Session : Symposium Session I

Moderator: Dr. biol. hom. Nastiti Wijayanti, S.Si., M.Si.

Room : Sunflower

Time	Code	Titles & Authors
13.00 – 13.15	BP-O-01	The preliminary study of enhancing black rice as functional food: expression pattern of flowering genes in long harvest black rice cultivar Cempo Ireng
		Yekti Asih Purwestri, Febri Adi Susanto and Anisa Nazera Fauzia
13.15 – 13.30	BP-O-02	Detection and transcription of homolog genes encoding conjugated linoleic acid in <i>Lactobacillus casei</i> strains isolated from gasterointestinal tract <i>Ari Surya Sukarno</i> , Donny Widianto and Widodo
13.30 – 13.45	BP-O-03	A preliminary study of inulin degradation in intestinal-origin lactic acid bacteria <b>Dwi Aditiyarini</b> and Widodo
13.45 – 14.00	BP-O-04	Cytotoxic activities of ethanolic extract fractions of black rice cv Woja Laka bran to colon cancer WiDr cells <b>Dwimei Pranatami</b> , Woro Anindito Sri Tunjung, Rumiyati, Lisna Hidayati and Rarastoeti Pratiwi
14.00 – 14.15	BP-O-05	Effect of Nilem (Ostheochilus hasselti) Egg Addition from West Java on Characteristics of Fish Stick  Emma Rochima, Azka Iqbal M, Iis Rostini, Nia Kurniawati and Junianto
14.15 – 14.30	BP-O-06	Synthesis and characterization of Hydroxy Propyl Cellulose (HPC) Snake fruit ( <i>Salaca edulis</i> Reinw ) "Pondoh Super" kernel <i>Evita Riviani Achmadi</i>
14.30 – 14.45	BP-O-07	Preliminary study on inulin extraction from Indonesian local tubers  Nur Kusmiyati, Tutik Dwi Wahyuningsih and Widodo
14.45 – 15.00	BP-O-08	The formulation of candied jelly of roselle calyces ( <i>Hibiscus sabdariffa</i> L.) with stability test and hedonic test  Anggun Agustina, <b>Nutrisia Aquariushinta Sayuti</b> and Agus Winarso

#### Bio-Prospecting SYMPOSIUM PRESENTATION SCHEDULE Thursday, October 27<sup>th</sup>, 2016

Session : Symposium Session I Moderator : Dr. Siti Sumarmi

Room : Ballroom

Time	Code	Titles & Authors
	0000	Hydrothermal treatment of sawdust and corn cobs biomass:
10.00 10.15		effect of process conditions on hydrochar properties
13.00 – 13.15	BP-O-09	Agus Prasetya, Ahmad Tawfiegurrahman Y., Cyrilla
		Oktaviananda and Ria Fauzia Rahmawati
10.45 10.00	DD 0 40	Biodiesel production from coconut oil by microwave
13.15 – 13.30	BP-O-10	Nur Hidayanti, <b>Heri Septya Kusuma</b> and Mahfud Mahfud
		The reduction of effects of greenhouse gases through the
		utilization of biogas from animal waste as an alternative fuel in
13.30 – 13.45	BP-O-11	Pangpajung Village, Bangkalan Regency, East Java
		Satyaguna Rakmatulloh, Efendi S Wirateruna and Singgih
		Hawibowo
		Diversity of endophytic bacteria in sweet sorghum (Sorghum
		bicolor (L.) Moench) and their potential for plant growth
13.45 – 14.00	BP-O-12	promoting
		Charlie Ester de Fretes, Ria Suryani, Yekti Asih Purwestri, Tri
		Rini Nuringtyas and Donny Widianto
		Evaluation of different culture media for improvement in
		bioinsecticides production by fusants Bacillus thuringiensis and
14.00 – 14.15	BP-O-13	their application against larvae of Crocidolomia binotalis, Zell.
		Siti Sumarmi, Retno Peni Sancayaningsih, Sebastian
		Margino, Hidayat Soesilohadi and A Khalimun Nur
		Identification tungro virus (rice tungro spherical virus) in plant
		rice (Oryza sativa Linnaeus) using buffer liquid detergent
14.15 – 14.30	BP-O-14	modified with applications based polymerase chain reaction
		marker
		Doni Hermawan
		The impact of giving Bruceine a biolarvicidal against
14.20 44.45	DD 0 45	behavioral response of <i>Aedesa egypti</i> Linnaeus larvae and its
14.30 – 14.45	BP-O-15	toxicity on Vero cells
		Dwi Sutiningsih, Mustafa, Tri Baskoro Tunggul Satoto and
		Edhi Martono Antiangiogenic activity of Spathoglottis plicata leaves
		chloroform extract in chick embryo Chorio Allantoic Membrane
14.45 – 15.00	BP-O-16	(CAM)
14.43 - 13.00	PL-0-10	Rika Trianasari, <b>Diana Cahya Ningrum</b> , Indah Nur'aini,
		Nadiyah Ahfadzani and Bambang Retnoaji
		riadiyan Amadzani and Dambang Nethoaji

## Bio-Prospecting SYMPOSIUM PRESENTATION SCHEDULE Thursday, October 27<sup>th</sup>, 2016

Session

: Symposium Session II : Woro Anindito Sri Tunjung, M.Sc., Ph.D. Moderator

Room : Carnation

Time	Code	Titles & Authors
13.00 – 13.15	BP-O-17	Cut off determination of HER-2 scoring statusbased on qPCR technique in frozen and archival, Formalin Fixed, Paraffin Embedded (FFPE) tissue of breast cancer  Desriani, Bugi Ratno Budiarto, Farida Mirnawati, Wirsma Arif Harahap and Noza Hilbertina
13.15 – 13.30	BP-O-18	Detection of asymptomatic, submicroscopic and spatial analysis of malaria pre-elimination in Eastern Indonesia <b>Jontari Hutagalung</b> , Kusnanto H, Supargiyono, Sadewa AH, Satyagraha AW, Novijanti Rintis, Garjito TA, Prihatin MT, Purwono, Darojatun Ida, Bai Apris, Bansai Immanuel, Kikhao Samueland Hananta L
13.30 – 13.45	BP-O-19	HER-2 Ile655Val detection in breast cancer using single closed tube Tm Shift SYBR2 Green I qPCR for supporting personalized therapy  Shabrina Syifa Ghaissani, Senja Rahayu Kinanti, Isna Nurhayati, Niken Satuti Nur Handayani, Dwi Wulandari, Bugi Ratno Budiarto and Desriani
14.00 – 14.15	BP-O-20	Nutraceutical quality of <i>Capsicum annuum</i> L. 'Katokkon' fruit in response to colchicine treatment <i>Reisky Megawati Tammu</i> , <i>Budi Setiadi Daryono and Tri Rini Nuringtyas</i>
14.15 – 14.30	BP-O-21	Solid dispersion from <i>Orthosiphon stamineus</i> with anticancer properties  Lusiana Arifianti, Sukardiman, Mulja Hadi Santosa and Tri Widiandani
14.30 – 14.45	BP-O-22	Preventing the Formation of Atherogenic Lesion on Type 2 Diabetes Patient with Devil's Horse Whip (Achyranthes aspera) Dion Adiriesta, Dewananda Megaria Ardiani, Raden Mas Ravi Hadyan, Novra Arya Sandi and Siti Isrina Oktavia Salasia
14.45 – 15.00	BP-O-23	Antibacterial activity of kaffir lime ( <i>Citrus hystrix</i> DC.) leaves and callus <b>Woro Anindito Sri Tunjung</b> , Dessy Liana, Hennisa and Lisna Hidayati

## Bio-Prospecting SYMPOSIUM PRESENTATION SCHEDULE Friday, October 28th, 2016

Session

: Symposium Session III : Luthfi Nurhidayat, S.Si, M.Sc. Moderator

Room : Carnation

Time	Code	Titles & Authors
13.00 – 13.15	BP-O-24	Growth promoting hormone produced by rhizobacteria isolates from pineapple ( <i>Ananas comosus</i> (L) Merr. 'Smooth Cayenne') <i>Auliana Afandi</i>
13.15 – 13.30	BP-O-25	Antioxidant capacity of superheated steam torrefacto roasted Nigella sativa L. Harivaindaran K. Veeriah, Boshra Varastegani and Tajul Aris Yang
13.30 – 13.45	BP-O-26	Egg quality of laying hens fed diets supplemented with purslane ( <i>Portulaca oleracea</i> ) rich in alpha-linolenic acid <i>Lilik R. Kartikasari</i>
13.45 – 14.00	BP-O-27	Times trends in antihypertensive drug use and hypertension in cohort database 2005-2009 of employees of oil and gas mining in East Kalimantan, Indonesia  Erna Kristin, Dwi Indria Anggraini, Alfi Yasmina and Iwan Dwiprahasto

## Bio-Prospecting SYMPOSIUM PRESENTATION SCHEDULE Friday, October 28th, 2016

Session

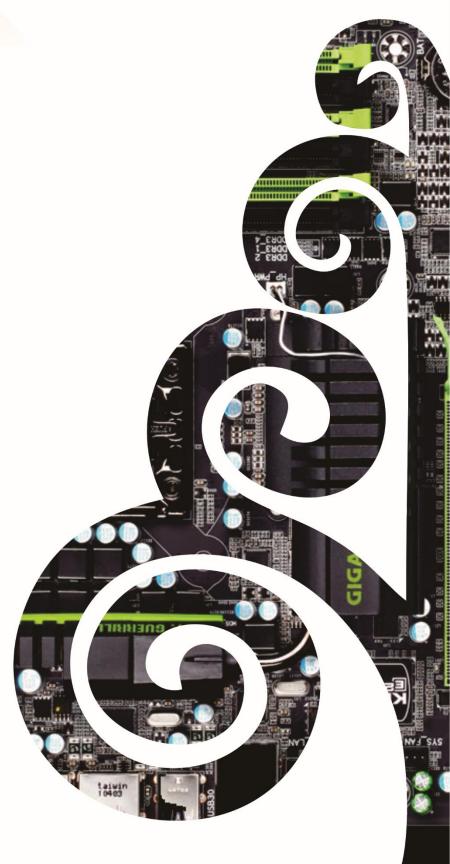
: Symposium Session III : Dr. rer. nat. Andhika Puspito Nugroho, S.Si., M.Si. Moderator

Room : Sunflower

Time	Code	Titles & Authors
10.30 – 10.35	BP-P-01	Performance of sleeping goby (Oxyeleotris marmorata) at Cirata Reservoir, West Java Province
		<b>Titin Herawati</b> , Ayi Yustiati, Atikah Nurhayati and Albar Maulana
10.35 – 10.40	BP-P-02	Potency of the extract of two species agarwood leaves as herbal drink  Tri Rini Nuringtyas, Hadi Hendra, Rini Isromarina, Atikah A, Yulisty Soraya Fadhilah, Riko Irwanto, Nastiti Wijayanti and Sukarti Moeljopawiro
10.40 – 10.45	BP-P-03	Combined effects of copper and cadmium on Chlorella pyrenoidosa H.Chick: Growth, subcellular accumulation and distribution of copper and cadmium  Andhika Puspito Nugroho, Niken Satuti Nur Handayani and I Gede Angga Pramudita
10.45 – 10.50	BP-P-04	Toxicity and antimalaria assay of ethyl acetate fractions of sponge <i>Ancorina</i> sp. from intertidal zone of Wediombo Beach Yogyakarta <b>Yuni Nurfiana Wulandari</b> , Respati Tri Swasono and Winarto Haryadi
10.50 – 11.00	BP-P-05	The immunomodulatory activity of leaves extracts of gaharu Aquilaria malaccensis lamk and Gyrinops versteegii (gilg.) domke in vitro Anjar Sulistyani, Nastiti Wijayanti and Tri Rini Nuringtyas
11.00 – 11.05	BP-P-06	In Vitro cytotoxic activity of ethyl acetate fractions of marine sponge <i>Calthropella</i> sp. collected from Gunungkidul Coastal Region  Fitria Susilowati, Respati Tri Swasono, Winarto Haryadi and Tatsufumi Okino
11.05 – 11.10	BP-P-07	Variation and color stabilization of annato ( <i>Bixa orellana</i> L.) seed extract for batik's natural dye  Lisna Hidayati, <b>Bernada Brenda Betaria</b> , Theresia Ines Santi,  Yekti Asih Purwestri and Tri Rini Nuringtyas

#### **SYMPOSIUM**

# **Computer Science**



Session

: Symposium Session I

Moderator Room : Abdul Jalil : Lotus

Time	Code	Titles & Authors
13.00 – 13.15	CS-O-01	Active battery cell balancing simulation using cell to cell Pulse Width Modulation (PWM) controlled converter by Fuzzy Logic Controller (FLC)  Abdul Jalil, Adha Imam Cahyadi, Oyas Wahyunggoro, Dimas Hasbi Habibi, Ghufron Fathoni and Paris Ali Topan
13.15 – 13.30	CS-O-02	An optimal input for role-playing game's combat pace using an active time battle system algorithm  *Agrivian Anditya* and Agus Sihabuddin*
13.30 – 13.45	CS-O-03	CPU and memory performance analysis on dynamic and dedicated resource allocation using XenServer in data center environment  Haydar Ali Ismail and Mardhani Riasetiawan
13.45 – 14.00	CS-O-04	SHA-2 and SHA-3 based sequence randomization algorithm  Kuntoro Adi Nugroho, Arimaz Hangga and I Made Sudana
14.00 – 14.15	CS-O-05	Simulation and experiment based optimization of calligraphy manufacturing using a 5-axis CNC milling machine <i>Muhammad Akhsin Muflikhun</i> , <i>Muslim Mahardika</i> , Subarmono and Heru Santoso Budi Rochardjo
14.15 – 14.30	CS-O-06	Design optimization of tri core PM linear generator using SA and FPA for wave energy conversion system in south coast of Java island F. D. Wijaya, Sarjiya, <b>Muhammad Rifa'i P.S</b> . and Kukuh Daud P.
14.30 – 14.45	CS-O-07	Power estimation of G.A. siwabessy multi-purpose reactor at start-up condition using artificial neural network with input variation  Nazrul Effendy, Nur Chalim Wachidah, Balza Achmad,  Prasojo Jiwandono and Muhammad Subekti
14.45 – 15.00	CS-O-08	State of Charge (SOC) and State of Health (SOH) estimation on lithium polymer battery via kalman filter <b>Paris Ali Topan</b> , M. Nisvo Ramadan, Ghufron Fathoni, Adha Imam Cahyadi and Oyas Wahyunggoro

Session Moderator : Symposium Session I : Agus Suryo Wibowo

Room

: Dahlia

Time	Codo	Titles Q Authors
Time	Code	Titles & Authors
13.00 – 13.15	CS-O-09	Combat aircraft effectiveness assessment using hybrid multi- criteria decision making methodology Agus Suryo Wibowo, Adhistya Erna Permanasari and Simi Fauziati
13.15 – 13.30	CS-O-10	Geographical information system for mapping accident-prone roads and development of new road using multi-attribute utility method  **Anik Vega Vitianingsih** and Dwi Cahyono**
13.30 – 13.45	CS-O-11	Implementation of multi-criteria collaborative filtering on cluster using apache spark  Ardhi Wijayanto and Edi Winarko
13.45 – 14.00	CS-O-12	Epilepsy detection on EEG data using backpropagation, firefly algorithm and simulated annealing Auli Damayanti, Asri Bekti Pratiwi and Miswanto
14.00 – 14.15	CS-O-13	Data classification for air quality on wireless sensor network monitoring system using decision tree algorithm  Bambang Sugiarto and Rika Sustika
14.15 – 14.30	CS-O-14	Overview on computational-based B-cell epitope prediction: dataset, method and accuracy <b>Binti Solihah</b> and Afiahayati
14.30 – 14.45	CS-O-15	Feature extraction and classification of the indonesian syllables using discrete wavelet transform and statistical features <b>Domy Kristomo</b> , Risanuri Hidayat and Indah Soesanti
14.45 – 15.00	CS-O-16	Enhancing quality of service for egovernment interoperability based on adaptive ontology  I Wayan Ordiyasa, Lukito Edi Nugroho, Paulus Insap Santosa and Wahyudi Kumorotomo

: Symposium Session II : Rini Indrayani Session

Moderator

Room : Lotus

Time	Code	Titles & Authors
		Increasing the security of MP3 steganography using AES
15.15 – 15.30	CS-O-17	encryption and MD5 hash function
	03-0-17	Rini Indrayani, Hanung Adi Nugroho, Risanuri Hidayat and
		Irfan Pratama
		Optimal cell selection scheme in femtocell networks using
15.30 – 15.45	CS-O-18	bacterial foraging optimization algorithm
		Sahirul Alam, I Wayan Mustika, Selo and Heng Lalin
		State of charge estimation of lithium polymer battery using
15.45 – 16.00	CS-O-19	ANFIS and IT2FLS
	03-0-19	Wahyuni Eka Sari, Oyas Wahyunggoro, Silmi Fauziati and
		Adha Imam Cahyadi
16.00 – 16.15 CS-O-		Numerical simulation of the effect of axial distance between
	- 16.15   CS-O-20	two rotors in counter-rotating wind turbine
		Yosua Heru Irawan and M. Agung Bramantya

Session : Symposium Session II Moderator : Khurniawan Eko Saputro

Room : Dahlia

Time	Code	Titles & Authors
		Development of semi-supervised named entity recognition to
15.15 – 15.30	CS-O-21	discover new tourism places
	US-U-21	Khurniawan Eko Saputro, Sri Suning Kusumawardani and
		Silmi Fauziati
		Fingerprint authentication system using back-propagation
15.30 – 15.45	CS-O-22	with downsampling technique
		Peter Juma Ochieng, Firmansyah, Kani and Hastuadi Harsa
		Convolutional Neural Network Implementation for Image-
15.45 – 16.00	CS-O-23	Based Salak Sortation
		Rismiyati N.A and Azhari S.N.
		Exploring mobile wallet adoption in indonesia using UTAUT2:
16.00 – 16.15	CS-O-24	An approach from consumer perspective
		Simon Megadewandanu, Suyoto and Pranowo

Session : Symposium Session III

Moderator : Vincentius Riandaru Prasetyo

Room : Lotus

	Time	Code	Titles & Authors
			Rating of indonesian sinetron based on public opinion in
10	.30 – 10.45	CS-O-25	twitter using cosine similarity
			Vincentius Riandaru Prasetyo and Edi Winarko
			Infant's cry sound classification using mel-frequency
10	0.45 – 11.00	CS-O-26	cepstrum coefficients feature extraction and back
10	0.45 - 11.00		propagation neural network
			Yesy Diah Rosita and Hartarto Junaedi
11	00 11 15	CS-O-27	On the new-message notification of information systems
''	11.00 – 11.15		Bambang Nurcahyo Prastowo
			Dengue hemorrhagic fever risk modeling based on casualties
11	.15 – 11.20	CS-P-01	and rainfall in Yogyakarta City
			Cut Madinna Tiraya

Session : Symposium Session III
Moderator : Ardhi W Santoso

Room : Dahlia

Time	Code	Titles & Authors
		Comparison of fuzzy filters on synthetic aperture radar image
10.30 - 10.45	CS-O-28	Ardhi W. Santoso, Dwi Pebrianti, Habibah Lateh, Luhur
		Bayuaji, Tien Sze Lim, and Jasni M. Zain
10.45 11.00	CS-O-29	Palm oil plantation area clusterization for monitoring
10.45 – 11.00	US-U-29	Aufaclav Zatu Kusuma Frisky and Agus Harjoko
		Combination schemes reversible data hiding for medical
11.00 – 11.15	CS-O-30	images
		Aulia Arham, Hanung Adi Nugroho and Teguh Bharata Adji
	CS-O-31	Spinal curvature determination from scoliosis x-ray image
11.15 – 11.30		using sum of squared difference template matching
11.15 – 11.50		Bagus Adhi Kusuma, Hanung Adi Nugroho and Sunu
		Wibirama

Session

: Symposium Session IV : Dharmayanti

Moderator

Room : Lotus

Time	Code	Titles & Authors
13.00 – 13.15	CS-O-32	Indonesian traditional dance motion capture documentation
13.00 - 13.15	CS-U-32	Ega Hegarini, <b>Dharmayanti</b> and Abdus Syakur
		ARMask apps development as an introduction media to
13.15 – 13.30	CS-O-33	introduce Indonesia Traditional Mask at Sonobudoyo
13.15 - 13.30	CS-O-33	Musuem using facetracking based augmented reality
		Dias Aziz Pramudita
		Block-based tchebichef image watermarking scheme using
13.30 – 13.45	CS-O-34	psychovisual threshold
13.30 - 13.43	03-0-34	Ferda Ernawan, Muhammad Nomani Kabir, Mohamad Fadli
		and Zuriani Mustaffa
		Stereo camera – based 3D object reconstruction utilizing
13.45 – 14.00	CS-O-35	semi-global matching algorithm
13.43 - 14.00	CS-O-35	M.S. Hendriyawan Achmad, Widya Setia Findari, Nurnajmin
		Qasrina Ann, Dwi Pebrianti and Mohd Razali Daud
		Automated detection and classification techniques of acute
14.00 – 14.15	CS-O-36	leukemia using image processing: a review
14.00 14.10	00 0 00	R.G Bagasjvara, <b>Ika Candradewi</b> , Sri Hartati and Agus
		Harjoko
		Evaluation of XBee-Pro transmission range forwireless
		sensor network's node under forestedenvironments based on
14.15 – 14.30	CS-O-37	Received Signal StrengthIndicator (RSSI)
		Iswandi, Herlina Tri Nastiti, Ina Eprilia Praditya, and I Wayan
		Mustika
		A study on algorithms of pupil diameter measurement
14.30 – 14.45	CS-O-38	Juni Nurma Sari, Hanung Adi N., Lukito Edi N., P. Insap
		Santosa and Ridi Ferdiana
		A visual recognition supporting tool for mapping
	CS-O-39	environmental data using handheld measurement
14.45 – 15.00		instruments
		Luthfi Zharif, <b>Balza Achmad</b> , Faridah and Mohammad Kholid
		Ridwan

SYMPOSIUM

# Nanosciences and Chemistry



#### INVITED SPEAKER SCHEDULE

#### **Nanosciences and Chemistry**

Time	Program	Venue					
	Thursday, October 27 <sup>th</sup> , 2016						
Symposium session II 13.00 – 14.30	<ol> <li>Dr. Yateman Arryanto         <ul> <li>Faculty of Mathematics and Natural</li> <li>Sciences, Universitas Gadjah Mada</li> </ul> </li> <li>Dr. Hendrik Lintang         <ul> <li>Ma Chung University, Malang</li> </ul> </li> </ol>	Garden					
	Moderator: Dr. Roto, M.Eng.						
14.30 - 14.45	Photo Session	Garden					
	Friday, October 28 <sup>th</sup> , 2016						
Symposium session III 10.30 – 11.10	Prof. Shilun Qiu Jilin University, China  Moderator: Prof. Dr. Nuryono	Garden					

Session : Symposium Session II Moderator : Dr. Dwi Siswanta

Room : Garden

Time	Code	Titles & Authors
15.00 – 15.15	NC-O-01	Synthesis of Gold Nanoparticles Using SDS and Sodium Citrate As Capping Agent and Its Recovery Into Pure Gold
10.00 10.10		<b>Agustina Sus Andreani</b> , Suyanta, Eko Sri Kunarti and Sri Juari Santosa
		Morphology of One-Time Coated Palladium-Alumina
		Composite Membrane Prepared by Combined Sol-gel Process
15.15 – 15.30	NC-O-02	and Electroless Plating Technique
		Ratna Sari, Ratni Dewi, Pardi, Lukman Hakim and Selvie
		Diana
	NC-O-03	Physico-Chemical Studies of LiM <sub>x</sub> Mn <sub>2-x</sub> O <sub>4</sub> (M: Mn, Co, Ni, Cr)
15.30 – 15.45		Prepared by Simple Solid-State Reaction
		<b>Dyah Purwaningsih</b> , Roto, Hari Sutrisno and Agus Purwanto
		Post-treatments to Enhance Vertical Alignment of ZnO
45 45 40 00	NC-O-04	Nanorods on Glass Substrates by Hydrothermal Deposition
15.45 – 16.00		Indriana Kartini, Wuri Apriyana, Chotimah, Yateman
		Arryanto, and Lianzhou Wang

Session : Symposium Session II
Moderator : Dr. Nurul Hidayat Aprilita

Room : Frangipani

	Time	Code	Titles & Authors
			Production of Biodiesel from Waste Cooking Oil by
	15 15 15 20	NC-O-05	Transesterification Reaction Using Nano-CaO/Natural Zeolite
	15.15 – 15.30	NC-U-05	Catalysts
			I Made Wisnu Adhi Putra and Ni Wayan Deswiniyanti
			Removal of Sulphate and Mn on Synthetic Wastewater in the
	15.30 – 15.45	NC-O-06	Sulphate Reducing Bioreactor Using Indonesian Natural
	15.30 - 15.45	NC-U-06	Zeolite
			Endah Retnaningrum and Wahyu Wilopo
			Mineralogy Variation of Zeolites, Structural Deformation and Its
			Impact to Tuffaceous Sandstone Diagenetic Anomaly in Kebo-
	15.45 – 16.00	NC-O-07	Butak Formation, Sumberan, Yogyakarta
			Kresna Dwi Payana, Ahmad Radian Karimullah, Rini Fahmita
			and Anastasia Dewi Titisari
Ī			Zeolite Loaded Alginate Membran for CO <sub>2</sub> and CH <sub>4</sub> Separation
	16.00 - 16.15	NC-O-08	Syardah Ugra al Adawiyah, Adhitasari Suratman and Endang
			Tri Wahyuni

Session : Symposium Session II

Moderator : Dr. Suherman

Room : Orchid

Time	Code	Titles & Authors
		The Use of Electrocoagulation Technique for Paper Mill
15.15 – 15.30	NC-O-09	Wastewater Treatment
		Galuh Yuliani, Kinia Mitasari and Agus Setiabudi
		Toxicity Test Of Chrome And Glutaraldehyde To Determine
15.30 – 15.45	NC-O-10	Greener Chemical In Tannery Industry
		Laili Rachmawati and Mustafidah Udkhiyati
		Conversion of Green House CO <sub>2</sub> Gas into Useful Hydrocarbon
15.45 – 16.00	NC-O-11	Gasses by Photoreduction Method over TiO <sub>2</sub> /SiO <sub>2</sub> from
15.45 - 16.00	NC-O-11	volcanic ash
		Endang Tri Wahyuni, Roto and Indra P. Iqbah
		Coconut Shell Charcoal as A Bioreductor in Roasting Process
		of Nickel Laterite from Pomalaa, Southeast Sulawesi:
16.00 – 16.15	NC-O-12	Performance and Kinetics Study
		Andreas Diga P.P., Edi Sugiarto, Sutijan, I Wayan Warmada
		and Himawan T.B.M. Petrus

Session : Symposium Session II Moderator : Dr. Deni Pranowo

Room : Violet

Time	Code	Titles & Authors
15.15 – 15.30	NC-O-13	Synthesis and Antibacterial Activities of N-Phenylpyrazolines from Veratraldehyde  Artania Adnin Tri Suma, Tutik Dwi Wahyuningsih and Deni Pranowo
15.30 – 15.45	NC-O-14	Synthesis of Curcumin Analogs Monoketone Curcumin-9 from Cinnamaldehyde and α-Glucosidase Enzyme Inhibition Assay <b>Yunia Mardianis</b> , Chairil Anwarand Winarto Haryadi
15.45 – 16.00	NC-O-15	New Synthesis of 3-bromo-4'hydroxychalcones and Their Antibacterial Activities  Lince Dameria Nadapdap and <b>Tutik Dwi Wahyuningsih</b>
16.00 – 16.15	NC-O-16	Synthesis Isoflavones Derivate: 7-Hydroxy-3',4'- Dimethoxyisoflavone, 7,3',4'-Trimethoxyiso-flavone and 7-O- Acetyl-3',4'-Dimethoxyiso-flavone  Sabirin Matsjeh, Chairil Anwar, Eti Nurwening Sholikhah and Anggie Sitta Pradhanti

Session : Symposium Session IV Moderator : Prof. Dr. Nuryono

Room : Garden

	Time	Code	Titles & Authors
Ī			Effect of Catalyst Addition Skin Against Chicken Egg
4	11.10 – 11.15	NC-P-01	Characteristics Biodiesel from Waste cooking oil
			Deni Rahmat
			Geochemical Characteristic of Geothermal Water around
	11.15 – 11.20	NC-P-02	Slamet Volcano, Central Java, Indonesia
	11.13 – 11.20	110-1-02	Kresna Dwi Payana, Ahmad Radian Karimullah, Rini Fahmita
			and Anastasia Dewi Titisari
			Mineralogy Variation of Zeolites, Structural Deformation and Its
	11.20 – 11.25	NC-P-03	Impact to Tuffaceous Sandstone Diagenetic Anomaly in Kebo-
	11.20 - 11.25	NC-P-03	Butak Formation, Sumberan, Yogyakarta
			Riswahyuli
Ī		NO 5 64	Multi Mycotoxins Analysis In Rice Using Lc-Ms/Ms
	11.25 – 11.30	NC-P-04	Dedi Mada

Session : Symposium Session IV

Moderator : Dr. Nurul Hidayat and Drs. Iqmal Tahir, M.Si.

Room : Garden

Time	Code	Titles & Authors
13.00 – 13.15	NC-O-17	Characterization of Allophane from Gamalama Volcanic Soil, North Maluku, Indonesia Indra Cipta, Nur A. Limatahu, St. Hayatun Nur Abu, Indriana
		Kartini and Yateman Arryanto
13.15 – 13.30	NC-O-18	Colorimetric Sensing of Fe <sup>3+</sup> Ion Based on Redox Reaction with Colloidal Ag Nanoparticles  *Roto Roto*, Marcelina Marcelina, Nurul H. Aprilita, Mudasir Mudasir, Taufik A. Natsir, and Bella Mellisani
13.30 – 13.45	NC-O-19	Study of Heavy Metal Ions Mn(II), Zn(II), Fe(II), Ni(II), Cu(II), And Co(II) Adsorption Using MFe <sub>2</sub> O <sub>4</sub> (M=Co <sup>2+</sup> , Mg <sup>2+</sup> , Zn <sup>2+</sup> , Fe <sup>2+</sup> , Mn <sup>2+</sup> , and Ni <sup>2+</sup> ) Magnetic Nanoparticles As Adsorbent <i>Wahyu Waskito Aji</i> and Edi Suharyadi
13.45 – 14.00	NC-O-20	Humic Acid Coated Fe <sub>3</sub> O <sub>4</sub> Nanoparticle for Phenol Sorption <b>Soerja Koesnarpadi</b> , Sri Juari Santosa, Dwi Siswanta and Bambang Rusdiarso
14.00 – 14.15	NC-O-21	Effect of Blend Volume Ratio on Morphology and Surface Properties of PVA/Chitosan Nanofibers  Nasikhudin, IntanPuspitasari, Markus Diantoro, Ahmad Kusumaatmaja and KuwatTriyana
14.15 – 14.30	NC-O-22	Micro and Nano Silver-Graphene Composite Manufacturing via Horizontal Vapor Phase Growth (HVPG) Technique <b>Muhammad A. Muflikhun</b> , Gwen B. Castillon, Gil N. C. Santos and Alvin Y. Chua
14.30 – 14.45	NC-O-23	Rapid Synthesis of Silver Nanoparticles Using m- Hydroxybenzoic Acid as Reducing Agent <b>Gusrizal</b> , Sri Juari Santosa, Eko Sri Kunarti and Bambang Rusdiarso
14.45 – 15.00	NC-O-24	Synthesis of Silver Nanoparticles Using o-Hydroxybenzoic Acid, p-Hydroxybenzoic Acid, and o,p-Dihydroxybenzoic Acid As Reducing Agent  Dian Susanthy, Fadliah, Endang Tri Wahyuni and Sri Juari Santosa

Session

: Symposium Session IV : Dr. Eko Sri Kunarti and Dr. Suherman Moderator

: Frangipani Room

Time	Code	Titles & Authors
		Characterization and Photocatalytic Activity of SiO <sub>2</sub> -TiO <sub>2</sub> -
13.00 – 13.15	NC-O-25	Polyaniline Nanocomposite
13.00 - 13.13	NC-U-25	<b>Sri Wahyuni</b> , Eko Sri Kunarti, Respati Tri Swasono and
		Indriana Kartini
		Synthesis of Fe <sub>3</sub> O <sub>4</sub> /TiO <sub>2</sub> -Co Nanocomposite as Model of
13.15 – 13.30	NC-O-26	Photocatalyst with Magnetic Properties
		M. Ramadhan, A. R. Pradipta, A. Syoufian and E.S. Kunarti
		Synthesis of Fe <sub>3</sub> O <sub>4</sub> /TiO <sub>2</sub> -Ni Composite as a Magnetically
13.30 – 13.45	NC-O-27	Recoverable Photocatalyst
		Shuluh Ashmarisya, E.S. Kunarti and I. Kartini
		Cobalt Oxide-Modified Titanium Dioxide Nanoparticle
13.45 – 14.00	NC-O-28	Photocatalyst for Degradation of 2,4-Dichlorophenoxy-Acetic
13.43 - 14.00	140-0-20	Acid
		Leny Yuliati
		The Effect of Chloride Salt Types in Silver Nanowires
14.00 – 14.15	NC-O-29	Morphology Synthesized using Polyol Method
		<b>Fadilah Fuad</b> , Kemal Maulidiasani, Junaidi and Kuwat Triyana
		Synthesis of Gold Nanoparticles Using SDS and Sodium
14.15 – 14.30	NC-O-30	Citrate As Capping Agent and Its Recovery Into Pure Gold
14.10 14.00		Agustina Sus Andreani, Suyanta, Eko Sri Kunarti and Sri
		Juari Santosa

Session

: Symposium Session IV : Dr. Dwi Siswanta and Dr. Roto Moderator

Room : Orchid

	Orchid	
Time	Code	Titles & Authors
13.00 – 13.15	NC-O-31	Utilization of Glycerol with Urea Using Purolite C100 Resin as Catalyst  Hary Sulistyo, Wahyudi Budi Sediawan and Suprihastuti Sri
		Rahayu
13.15 – 13.30	NC-O-32	The Effects Of Grain Size, Oxidizers And Catalysts On Band Gap Energy Of Gelam Wood Carbon Nirwan Syarif and Yuanita Windusari
13.30 – 13.45	NC-O-33	Classification Of Stevia Rebaudiana Using Near Infra Red Spectroscopy And Multivariate Data Analysis Yohanes Martono, Ferdy S. Rondonuwu and Suryasatriya Trihandaru
13.45 – 14.00	NC-O-34	Chitosan Flocculation-sedimentation for Harvesting Microalgae Nannochloropsis sp. <i>Yano Surya Pradana</i>
14.00 – 14.15	NC-O-35	Comparison of Design Method for Making Composite of (PMMA/HA/SERICIN)  Alva Edy Tontowi, Kristiani Putri Raharjo, Ray Indra Sihaloho and Dawi Karomati Baroroh
14.15 – 14.30	NC-O-36	Modification of Silica Coated on Iron Sand Magnetic Material with Chitosan Using Grafting Agent of 3–Glycidoxypropyltrimethoxysilane for Adsorption of [AuCl <sub>4</sub> ]– <i>Muflikhah</i>
14.30 – 14.45	NC-O-37	Effect of Shot Peening on Hardness and Pitting Corrosion Rate on Load-Bearing Implant Material AISI <sub>3</sub> 0 <sub>4</sub> <b>Priyo Tri Iswanto,</b> Bambang Hari Priyambodo, Trio Nur Wibowo, Nur Amin and Puput Iin Qu'aini
14.45 – 15.00	NC-O-38	The Release of Curcumin from Glutaraldehyde-Crosslinked Chitosan/Carrageenan Film <b>DwiSiswanta</b> , Arintina Sri Maradewi and Nurul Hidayat Aprilita

Session

: Symposium Session IV : Dr. Ria Armunanto and Dr. Tutik Dwi Wahyuningsih Moderator

Room : Violet

Time	Code	Titles & Authors
		Mathematical Modeling of Oryzanol Separation from Rice Bran
13.00 – 13.15	NC-O-39	Oil by Silica-based Batch Adsorption: Equilibrium and Mass
13.00 - 13.13	110-0-39	Ari Diana Susanti, Wahyudi Budi Sediawan, S.K. Wirawan
		and Budhijanto
13.15 – 13.30	NC-O-40	Multi Mycotoxins Analysis In Rice Using LC-MS/MS
10:10 10:00	110 0 10	Riswahyuli, Loise R.S, and Niza Nemara
		Validation of Testing Method for Porcine Contaminant in
		Meatballs by Real Time-Polymerase Chain Reaction (RTi-
13.30 – 13.45	NC-O-41	PCR) Method
		<b>Tri Joko Raharjo</b> , Ery Nourika Alfiraza, Esti Enjelina and Deni Pranowo
		New Lubricant from Used Cooking Oil: Cyclic Ketal of Ethyl
13.45 – 14.00	NC-O-42	9,10-Dihydroxyoctadecanoate
13.45 - 14.00	NC-0-42	Yehezkiel Steven Kurniawan, Muslih Anwar and Tutik Dwi
		Wahyuningsih
		Increasing Yield Strength of AISI 316L Plastically Deformed by
14.00 – 14.15	NC-O-43	Expanded Hole Techniques
14.00 - 14.15	NC-0-43	Urip Agus Salim, Suyitno, Rahadyan Magetsari and Muslim
		Mahardika
		Investigation on Palm Fatty Acid Distillate (PFAD) based Alkyd
14.15 – 14.30	NC-O-44	Resin and Styrene as a Coating Material
14.13 - 14.30	110-0-44	Rochmadi, Budhijanto, M. Fahrurrozi, Suhandono, Febbie
		Setyaningrum and Adimas Prasetyaaji
		Study of Thermal Oxidation Duration on The Microhardness,
14.30 – 14.45	NC-O-45	Surface Roughness, and Wettability of Cp-Titanium Cast
		Benidiktus Tulung Prayoga, Suyitno and Rini Dharmastiti
		Coating of L-Arginine Modified Silica on Magnetite through
14.45 – 15.00	NC-O-46	Two Different Sol-Gel Routes
		Amaria, Nuryono and Suyanta

The 2<sup>nd</sup> International Conference on Science and Technology 2016

Physics and Its Applications



### INVITED SPEAKER SCHEDULE Physics and Its Applications

Time	Program	Venue			
	Thursday, October 27 <sup>th</sup> , 2016	Thursday, October 27 <sup>th</sup> , 2016			
Symposium session I 13.00 – 13.30	Symposium Physics Departemen, Session I Universitas Jenderal Soedirman Hibiscus				
	Friday, October 28th, 2016				
Symposium session III 10.30 – 11.00	Imam Baru Rahardjo, Ph.D. PT Pertamina Geothermal Energy  Moderator: Dr. Sintia Windhi Niasari	Hibiscus			

Session : Symposium Session I Moderator : Dr. Moh. Adhib Ulil Abshor

Room : Hibiscus

<del>)</del>	Code	Titles & Authors
		Statistical properties of soft mode turbulence at the high
3.45	PA-O-01	control parameter in nematic liquid crystal
		Alvera Wulandhanik and Fahrudin Nugroho
4.00	PA-O-02	Chirality analysis on a square chiral metamaterial
4.00	170 02	Juliasih Partini, Kamsul Abraha and Arief Hermanto
		Effect of chemical reduction temperature on optical
		properties of reduced Graphene Oxide (rGO) and its potential
4.15	PA-O-03	as supercapacitor device
		Haris Suhendar, Ahmad Kusumaatmaja, KuwatTriyana and
		Iman Santoso
		The effect of ultra-sonication time towards the optical
		absorbance of graphene oxide (GO) synthesized from
4.30	PA-O-04	graphite pencil rod using electrolysis method
		Bagas Prakoso, Rita Prasetyowati, W.S. Brams Dwandaru,
		and Iman Santoso
		Optimization algorithm for parking problem: a case study in
4.45	PA-O-05	Universitas Gadjah Mada Yogyakarta Indonesia
		Pekik Nurwantoro
		Influence of ferrite on fifteen topology generator axial flux
F 00	DA 0 00	permanent magnet to magnet flux density
5.00	PA-U-06	Prih Sumardjati Mulyaseputra, Sasongko Pramono Hadi,
		F. Danang Wijaya and Suharyanto
	3.45 4.00 4.15	3.45 PA-O-01 4.00 PA-O-02 4.15 PA-O-03 4.30 PA-O-04 4.45 PA-O-05

Session : Symposium Session II
Moderator : Dr. Moh. Adhib Ulil Abshor

Room : Hibiscus

Time	Code	Titles & Authors
15.15 – 15.30	PA-O-07	The impact of electrode voltage variation towards optical absorbance of Graphene Oxide (GO) synthesized from pencil 2b material using electrolysis method  Arif Rahman, Rita Prasetyowati, W.S. Brams Dwandaru and Iman Santoso
15.30 – 15.45	PA-O-08	The separation of oil/water emulsion used membrane fibers polyacrylonitrile with Dead-end and Cross-flow fitration system  Bella Nurfadilah, Ahmad Kusumaatmaja and Kuwat Triyana
15.45 – 16.00	PA-O-09	Optimization of Chitosan/PVA Nanofibers Membrane Concentration and its Prospects for Air Filtration <i>Himayatus Shalihah</i> , Ari Dwi Nugraheni, Ahmad Kusumaatmaja and Kuwat Triyana
16.00 – 16.15	PA-O-10	Study of hydrophilic/hydrophobic property on polyacrylonitrile/cellulose acetate nanofiber membrane <i>Wahyuna Nur, Ahmad Kusumaatmaja and Kuwat Triyana</i>
16.15 – 16.30	PA-O-11	Spreading dynamics of corrosion on metal surface material using site percolation model  **Ramadian Ridho Illahi*, Fahrudin Nugroho and Pekik Nurwantoro**

Session : Symposium Session II
Moderator : Dr. Ahmad Kusumaatmaja

Room : Heliconia

	Time	Code	Titles & Authors
	15.15 – 15.30	PA-O-12	Pitch rotational motion model and control of glider fix wing unmanned aerial vehicles  Tri Kuntoro Priyambodo, Muhammad Shafa Rinardi, Andi
١			Dharmawan and Oktaf Agni Dhewa
	15.30 – 15.45	PA-O-13	PID control systems using LQR approach for quadrotor flight stability
ŀ			Andi Dharmawan, Ahmad Ashari and Agfianto Eko Putra
	15.45 – 16.00	PA-O-14	Infrared and ultrasonic sensors performance on mobile robot inspection for distance measuring system
			Riky Tri Yunardi, Winarno and Pujiyanto
	16.00 – 16.15	PA-O-15	Design of 9.4 GHz dielectric resonator oscillator with one stage amplifier <b>Yana Taryana</b> , Y. Sulaeman, T. Praludi and Y. Wahyu

Session : Symposium Session II Moderator : Dr. Sintia Windia Niasari

Room : Magnolia

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Time	Code	Titles & Authors
15.15 – 15.30	PA-O-16	Fractional-N PLL synthesizer for FMCW signal generator with Dual-Mode modulation pattern <b>R. Indra Wijaya</b> , Dayat K, Ros S.N, Bagus E.S, and Dadan M
15.30 – 15.45	PA-O-17	Analysis of three phase inverter using SVPWM as induction motor drive for electric bike application  **Amir Hamzah*, Suwitno, Romy and Ronaldi Hutabalian*
15.45 – 16.00	PA-O-18	Application of skew, phase tensor and polar diagram in magnetotelluric data analysis, case studies: Way Silabung geothermal field, Indonesia and Cascadia Subduction Zone, USA  Dina Sari Handayani, Rakhmat Nurdiantoro, Sintia Windhi Niasari and Asep Sugianto
16.00 – 16.15	PA-O-19	Magnetotelluric data analysis using Swift skew, Bahr skew, polar diagram, and phase tensor, study case: Yellowstone, US  Erick Pranata, SelviMisnia Irawati and Sintia Windhi Niasari
16.15 – 16.30	PA-O-20	Earthquake monitoring system at Physics Department, Universitas Gadjah Mada, Yogyakarta, Indonesia (present and next plan) Afif Rakhman

#### Physics and its Aplication SYMPOSIUM PRESENTATION SCHEDULE Friday, October 28th, 2016

Session : Symposium Session III
Moderator : Dr. Sintia Windhi Niasari

Room : Hibiscus

Time	Code	Titles & Authors
11.00 - 11.05	PA-P-01	Power discharge the capacitor for magnetizing permanent magnet multipole
		Nanang S., Tony K., Novrita I. and Dedi
11.05 – 11.10	PA-P-02	Design & development of Subcritical Assembly for Mo99 Production (SAMOP)
		Syarip, Tegas S., Edi Trijono B.S.and Endang Susiantini
		Detection of ethylene (CH <sub>4</sub> ), acetone (C <sub>3</sub> H <sub>6</sub> O), ammonia
11.10 – 11.15	PA-P-03	(NH <sub>3</sub> ) gas in exhaled breath of smoker using CO <sub>2</sub> laser
11.10 - 11.15		photoacoustic spectroscopy with multicomponent analysis
		Mahardika Yoga Darmawan, M. Ali Joko W. and Mitrayana
		Analysis of measurement uncertainty of motor-winding
11.15 – 11.20	PA-P-04	temperature rise on washing machine heating-test
		Himma Firdaus and Nanang Kusnandar

#### Physics and its Aplication SYMPOSIUM PRESENTATION SCHEDULE Friday, October 28th, 2016

Session : Symposium Session IV
Moderator : Dr.Iman Santoso

Room : Heliconia

Ī	Time	Code	Titles & Authors
			The effect of temperature substrate of the crystal quality and
	13.00 – 13.15	PA-O-21	chemical composition Sn (S0,5Te0,5) thin films contrencation
			by vacuum evaporation method
			Ariswan, Wahyu Lestari and Hilma Eka Masitoh
			Characterization of CO <sub>2</sub> laser photoacoustic spectrometer
	13.15 – 13.30	PA-O-22	intracavity configuration and its application in measuring
	13.15 – 13.30	PA-0-22	aceton (C <sub>3</sub> H <sub>6</sub> O) gas concentration of human exhaled breath during exercise on treadmill
			Mitrayana, N. Muyasaroh, M.A.J Wasono and M.R. Ikhsan
ŀ			Hairpin bandpass filter using defected square groove for S-
	13.30 – 13.45	PA-O-23	band radar
	10.00		<b>Teguh Praludi</b> , Yana Taryana, Yaya Sulaeman and Dedi
ŀ			Solar radio burst data processing and overview of type of
			solar burst detected by CALLISTO system at Sumedang in
	13.45 – 14.00	PA-O-24	Indonesia
			Mario Batubara, Timbul Manik, Peberlin Sitompul, Mustofa
ļ			Lathief, Muhamad Zamzam and Farahhati Mumtaha
			Quality inspection system for earthenware products using
	14.00 – 14.15	PA-O-25	digital X-ray radiography
ļ			Gede Bayu Suparta and Andreas C. Louk
			Transition from Markovian to glassy dynamics in damped
	14.15 – 14.30	PA-O-26	Kuramoto-Sivashinsky equation
			Halim Hamadi, Fahrudin Nugroho and Pekik Nurwantoro
			Numerical study of dual-stage diffuser using CFD applied to
	14.30 - 14.45	PA-O-27	wind turbine in low and fluctuated wind speed area
			<b>Dani Rifai</b> , Deni Eko Santoso, Dimas Irawan and Ridho Restu Adi
ŀ			Application of pulse electric field for chemical extraction
	14.45 – 15.00	PA-O-28	process
			<b>Prima Asmara Sejati</b> , Rella M., Ardhi W. S.and Arief B.

#### Physics and its Aplication SYMPOSIUM PRESENTATION SCHEDULE Friday, October 28th, 2016

Session : Symposium Session IV Moderator : Dr.Edi Suharyadi

Room : Magnolia

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Time	Code	Titles & Authors
13.00 – 13.15	PA-O-29	The calculation of full gravity gradient tensor and its application to fault detection as a geothermal controller in Ambon and Seram Islands  Richard Lewerissa, Sismanto, Ari Setiawan and Subagyo Pramumijoyo
13.15 – 13.30	PA-O-30	Vertical electrical sounding analysis for subsurface water bearing identification due to isolated hill <b>Eddy Hartantyo</b>
13.30 – 13.45	PA-O-31	Resistivity distribution of cascadian subduction zone (in the Western Part of United States) from two dimensional inversion of magnetotelluric data  Atria Dilla Diambama
13.45 – 14.00	PA-O-32	Identification of andesite distribution in Kalisonggo area using geoelectric and VLF (Very Low Frequency) methods Febrian Dedi Sastrawan and Sismanto
14.00 – 14.15	PA-O-33	Evaluation of combining land and waters data on local gravimetric geoid modelling (case study: D.I. Yogyakarta Coastal area)  Halim Wiranata, Leni Sophia Heliani and Nurrohmat Widjajanti
14.15 – 14.30	PA-O-34	Landslide potential analysis using microtremor and slope data on Bengkulu-Kepahiang main road at Km 31-60 <b>Arif Ismul Hadi</b> , Sismanto and Kirbani Sri Brotopuspito
14.30 – 14.45	PA-O-35	Resistivity image of the Parangwedhang geothermal field, Indonesia from synthetic model of magnetotelluric data <b>Sintia Windhi Niasari</b>
14.45 – 15.00	PA-O-36	Static testing of lumbar total disc replacement implant Rela Adi Himarosa and Suyitno

# SYMPOSIUM Geo Maritime



#### Geomaritime SYMPOSIUM PRESENTATION SCHEDULE Thursday, October 27<sup>th</sup>, 2016

Session : Symposium Session I

Moderator : Muhammad Kamal, S.Si., M.GIS., Ph.D.

Room : Tulip

Time	Code	Titles & Authors
		Review on tsunami risk reduction in Indonesia based on
13.00 – 13.15	GM-O-01	coastal and settlement typology
13.00 - 13.13	GIVI-O-01	<b>Djati Mardiatno</b> , M. Ngainul Malawani, Dandun Wacano and
		Despry Nur Annisa A
		Performance evaluation of ordinary kriging and inverse
13.15 – 13.30	GM-O-02	distance weighting methods for nickel laterite resources
13.13 - 13.30	GIVI-O-02	estimation
		Waterman Sulistyana Bargawa and Hendro Purnomo
		Placement optimization and capacity of wind-based DG to
13.30 – 13.45	GM-O-03	minimize losses by FPA method
		<b>Dian Budhi Santoso</b> , Sarjiya and Sasongko Pramono Hadi
		Economic valuation of mangrove ecosystem servicesin
13.45– 14.00	GM-O-04	Coastal Area of Pekalongan City
		Tiara Sarastika, Rika Harini and Muh Aris Marfai
		Assessment of hazards in coastal area for maritime
		sustainable development (Case of tidal flood and shoreline
14.00 – 14.15	GM-O-05	change in Sayung Coastal Area, Demak Regency,
		Indonesia)
		Achmad Andi Rif'an, R. Rijanta and Djati Mardiatno
		Sea level rise of West Sumatra Waters based on multi-
14.15 – 14.30	GM-O-06	satellite Altimetry data
		Isna Uswatun Khasanah and Masrinedi Umara
		Integrated border: concept for join management of Indonesia-
14.30 – 14.45	GM-O-07	Malaysia-Thailand maritime border area to enhance the
1 1100	J 5 5.	regional economic growth
		Agung Satriyo Nugroho and Purwo Santoso
		Co-agglutination rapid test of viral neuro necrosis at Batam
14.45 – 15.00	GM-O-08	and Tanjung Pinang, Sumatra: field trials
		Surya Amanu, Hamdu H. Putra and <b>Kurniasih</b>

#### Geomaritime SYMPOSIUM PRESENTATION SCHEDULE Thursday, October 27<sup>th</sup>, 2016

Session : Symposium Session II

Moderator : Ratih Fitria Putri, S.Si., M.Sc., Ph.D.

Room : Tulip

	Time	Code	Titles & Authors
			Identification of Rhizophora stylosa based on its spectral
	15.15 – 15.30	GM-O-09	reflectance: a preliminary work in Karimunjava mangrove
	15.15 – 15.50	GIVI-O-09	forest
			Muhammad Kamal
			Assessing the capability of Sentinel-2 data for mapping
			seagrass percent cover in Jerowaru, East Lombok
	15.30 - 15.45	GM-O-10	Muhammad Afif Fauzan, Ignatius S. Wisnu Kumara, Rifka
			N. Yogyantoro, Satrio W. Suwardhana, Nurul Fadhilah, Santi
			Apriyani, Intansania Nurmalasari and Pramaditya Wicaksono
			Spatial modeling for silvofishery and greenbelt to reduce the
			impact of sea level rise
	15.45 - 16.00	GM-O-11	(Case Indramayu coastal area)
			Desy Wahyuning Tyas, Fredi Satya Candra Rosaji, Muh
			Aris Marfai and Nurul Khakhim
	16.00 – 16.15 GM-O-12	Coastal management based on spatial and temporal B-Value	
		analysis in the Southeast Sulawesi, Indonesia	
			Despry Nur Annisa Ahmad, Abdi Jihad and Djati Mardiatno

#### Geomaritime SYMPOSIUM PRESENTATION SCHEDULE Friday, October 28<sup>th</sup>, 2016

Session : Symposium Session III

Moderator : Muhammad Kamal, S.Si., M.GIS., Ph.D.

Room : Tulip Room

Time	Code	Titles & Authors
		Analysis of Geo-maritime-Based Marine and Fisheries
10.30 - 10.45	GM-O-13	Economic Development In Maluku Islands
		Atikah Nurhayati, Idris and A.H. Purnomo
		Accuracy assessment of regional and global tide models
10.45 – 11.00	GM-O-14	using terrestrial tide gauges and satellite altimetry data in the
10.45 - 11.00	GIVI-O-14	coastal waters of Java Island
		Leni S. Heliani and Maritsa
		Investigating Conservation Area Based on Tsunami Hazard
11.00 – 11.15	GM-O-15	Mapping in Sand Dune Parangtritis Coastal Area
11.00 - 11.15	GIVI-O-15	Ratih F. Putri, Sunu Wibirama, Sukamdi and Josaphat T.S.
		Sumantyo
		Coastal and Marine Tourism of Small Islands In The Aru
11.15 – 11.30	GM-O-16	Islands, Maluku
		Dyah Widiyastuti and Wijaya Ladampa

#### Geomaritime SYMPOSIUM PRESENTATION SCHEDULE Friday, October 28<sup>th</sup>, 2016

Session : Symposium Session IV

Moderator: Ratih Fitria Putri, S.Si., M.Sc., Ph.D.

Room : Tulip Room

	Time	Code	Titles & Authors
-			The Community's Livelihood Assets Towards Tidal Flood
k	13.00 - 13.15	GM-O-17	Hazard In Timbulsloko Coastal Area
			Lintang Murpratiwi
			Ground Water Resources Mapping for Small Island Using
	13.15 – 13.30	GM-O-18	Geoelectrical Technique The Case Study of Ternate Island
			M. Pramono Hadi, Ramdani Salam and Rahim Achmad
			Coastal Acidification as Nutrients over Enrichment: A Case
	13.30 - 13.45	GM-O-19	Study in Ambon Bay, Indonesia
			Idha Y. Ikhsani, Donna M. Siahaya and Frilla R.T. Saputra
Γ			Volcano-Tectonic Control Of Andesite Potential Distribution
	13.45 – 14.00	GM-O-20	at Kulonprogo Mountainous Area, Yogyakarta-Indonesia
			<b>Asmoro Widagdo</b> , Subagyo Pramumijoyo, Agung Harijoko
			and Ari Setiawan
			Land Use Changes Analysis To Land Subsdence Hazard In
	14.00 – 14.15	GM-0-21	Coastal Areas (Case Study: North Semarang Sub-District)
			Ghefra R. Gaffara, Dyah R. Hizbaron and M. Aris Marfai

#### THE 2<sup>nd</sup> INTERNATIONAL CONFERENCE ON SCIENCE AND TECHNOLOGY 2016

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